

MBERS'S JOURNAL

POPULAR

LITERATURE, SCIENCE, AND ART

fifth Series

ESTABLISHED BY WILLIAM AND ROBERT CHAMBERS, 1832

No. 312,—Vol. VI.

SATURDAY, DECEMBER 21, 1889.

PRICE 11d.

THE BAHAMA FIBRE INDUSTRY.

As efforts have been made of late to bring into notice a hitherto little-known dependency of England, the Bahama Islands, with a view to the development of the Fibre Industry, for which its soil renders it especially suitable, it may perhaps interest our readers to learn some particulars of these islands from one who has long resided there.

When, some dozen years ago, we stated to our friends our intention of going to the Bahamas, it was amusing to note the various ways in which our announcement was received. greater part in blank amazement asked, 'Where are the Bahamas? We never heard of such a place.' Others hearing mention of Nassau, the capital, immediately relegated us to Germany, and assured us it would be extremely cold for a winter residence. Others, again, confounded it with the Bermudas, and spouted Moore's song of the bulbul. One, a sea-captain, whose wanderings had led him to America, gravely shook his head, and warned us that we were going to an extremely wicked place, a community of wreckers; and so forth.

Notwithstanding all this ignorance on the part of those who must certainly have learnt in their school-days that the Bahama or Lucayos Islands are the most northerly group of the West Indies, lying off the coast of Florida, U. S. A., we found on our arrival at Nassau that the Bahamas have a history. They are of no mushroom growth, the offspring of gold-fields and diamond mines. They were discovered by Columbus, whose more than life-size statue guards the flight of steps to Government House; and these islands were to him the forerunners of the New World. One of them long enjoyed the reputation of being that on which he was saved from shipwreck, hence named by him San Salvador; but modern ideas have transferred that honour to Watling's Island. The Bahamas were discovered in 1492; and the present island of New Providence received from Columbus the name of Fernandino, in a troublesome weed which no amount of hard

honour of his sovereign. But in the splendour of their after-conquests the Spaniards forgot the Bahamas, and they were rediscovered nearly two hundred years later by Captain Sayle, an English navigator, on his way to Carolina in 1667. He gave the name of Providence to the island on which he was wrecked; and finally, to distinguish it from another place of that name, it was called New Providence. The Bahamas were annexed to England, and in 1672 a governor was sent out to settle the new colony.

But during the nearly two hundred years since its abandonment by the Spaniards, the Bahamas had become the headquarters of pirates, for whom its dangerous and intricate channels and endless islets and creeks rendered it a safe hiding-place; and these outlaws sorely troubled the early days of the colony, and made the lives of the governors a burden to them. At length, under the leadership of one Black Beard, they became so intolerable that an English force was sent to suppress them.

The Spaniards looked with some jealousy on the improved condition of a colony so near their own possessions, and during the American War of Independence seized upon them. The ruins of a strongly built Spanish fort are still to be seen choked up with bush at the west end of the island of New Providence; whilst two others, Fort Charlotte and Fort Montagu, are still in good condition. Spanish gold hoards, doubtless of the pirates, have been found at various times. At the close of the war, the Bahamas were retaken by the gallantry of a young English naval officer named Maynard; and for many years the colony prospered, as may be seen by the remains of country-houses in the different islands now going to ruin. On the abolition of slavery, the owners, unable to cultivate their large tracts of land, in many cases abandoned them to their slaves, and much of it has returned to bush.

No one in those days paid much attention to the Sisal plant (Agave sisilana) -of which more than one species grows wild-except to regard it as

nsage could exterminate. It was only some few years ago that its value was discovered, and a few enterprising men turned it to some account for rope-making. It is especially valuable for ship cables, as it has been found to resist the action of sea-water better than most materials used for their manufacture. To convey a general idea of the appearance of the plant, one may say it is something like an aloe, but grows to a very large size, some of the leaves from which the fibre is extracted being six feet long with sharp points at the end; others have hooks all down the sides. There are seven dif-ferent kinds of Sisal, some of which are valueless, but all yield a fibre. The Sisal plant has been grown for many years at Yucatan, a barren and rocky coast, with great success, and brings large profits, as, once planted, it spreads rapidly and needs little care. The soil of the Bahamas is said to be even more suitable for its growth than that of Yucatan. The plant grows wild, and all that is required for its cultivation is to clear some land—the more rocky the better—then plant young shoots in rows of about twelve feet apart, with a path between of about eighteen feet, to allow for growth and for carts to pass between. This work can be done by women at ninepence a day.

As the plant requires at least three years to reach perfection, it is necessary for all who embark in its cultivation to have something to fall back upon, either a small income or some occupation to support them until the plants have reached maturity. This might be found in growing fruit and vegetables, for which there is an opening. The market is not well supplied, the greater part coming from the out-islands. Bananas, oranges, shaddock, limes, mangoes, mammee, sappadillo, sour-sop, avocado pear, bread-fruit, guavas, melons, pine-apples, sugar-apples, and cocoa-nut are the chief fruits. Potatoes both sweet and Irish, yams, cassava, various kinds of pea and bean, okra, tomato, pumpkin, with some English vegetables-lettuce, cabbages and turnips, carrots, parsley and thyme, will all grow with care in the winter season; but in consequence of the long droughts which often prevail, some system of irrigation, such as is adopted in India, is very necessary. The black people can scarcely be considered a docile race, at least as compared with Hindu coolies, nor are they so industrious. They seem to have an idea that it is a flying in the face of Nature and of Providence to water. But, fortunately, a drought rarely prevails over all the Bahamas at once, and therefore in the winter season New Providence depends mainly on the out-islands for fodder for cattle and horses. Oats and hay are imported from America for the favoured few; but the general run of horses and mules have to learn to feed on blades-the leaf and stalk of Indian corn-on the corn itself, and on Guineagrass; whilst in times of scarcity they have to fall back on the boughs of various kinds of trees -pride of India, mastic, Sydney-cod, and jumby; but as this last causes the hair to drop from the tail and mane, it is generally forbidden to horses.

New Providence is by no means the largest of the Bahama Islands, of which, including all the cays or rocky islets, there are some six hundred. Only from eighteen to twenty are inhabited,

some entirely by blacks, a few chiefly by whites. Andros, sixty miles from New Providence, is considerably larger and well wooded. Eleuthera and Abaco, long narrow strips of land, and Cat Island or San Salvador, are the chief pine-growing islands. Exuma and Inagua have wild horses, and rear most cattle. But New Providence is more conveniently situated for trade, having a good harbour. It is slightly larger than the Isle of Wight, being twenty-seven miles long by fourteen wide, lying east and west. Nassau, the capital, is the only town, and has a cathedral and a bishop's residence. There are settlements in many of the out-islands. Nassau harbour is formed by a long narrow strip of land which runs parallel with the shore for two or three miles, called Hog Island. As you cross the bar and get beyond the reach of the Atlantic billows the calm is instantaneous. The colour of the water itself changes; a lovely transparent green blue takes the place of the indigo waves outside. This lovely sea of ever-changing, ever-beautiful tints is one of the great charms of Nassau. An English sea looks leaden and colourless after these sapphire waters, which, whether lashed by storms or in dead calm, look equally beautiful.

Nassau itself is a clean little city, with a principal street running along the shore. No smells suggestive of yellow fever greet the nose on landing, as at Cuba and Jamaica; but neither are there any grand mountains suggestive of earthquake to enchant the eyes. The Bahamas are sadly flat, as befits their coral formation. Some two or three of the islands boast of hills; one has an approach to a river. New Providence contains two lakes, both brackish; but plenty of excellent water can be found almost anywhere by digging, and there are wells to almost every dwelling-house. Rain-water kept in tanks is chiefly used for drinking. The whole island is a well with a shallow layer of soil; the yearly deposit of leayes is a priceless treasure, and even weeds are rarely burnt by the thrifty, though bush-clearings are generally done by fire. It is a question whether this mode of agriculture does not impoverish the ground.

Considering the lack of soil, it is surprising that the trees in these islands attain to the size they do. There is a great variety of them, and some are very large. The roots of many spread along the ground to great distances, and these, such as the tamarind tree, are easily overturned by hurricanes; but so tenacious are they of life, that in this prostrate condition they throw out Others root new roots and continue to thrive. themselves in crevices of the rock, striking downwards till they reach water, which is never very far below. Others, again, such as the ceiba or silk-cotton tree, throw out large buttresses from their stems to make up for depth. One growing in the centre of the public buildings at Nassau could accommodate several horses with separate The chief trees are the cocoa-nut palm, tamarind, ceiba, sandbox, horseflesh (a species of mahogany), gumalamy, logwood, and three kinds of fig or banyan. The ponsiana, a very hand-some tree with flaming masses of blossom of a brilliant scarlet, was introduced from Demerara, and for many months of the year brightens the

In the centre of the island is a fir forest, or, as here called, 'pine barren,' the resort of wild pigeons—almost the only game, except a few water-birds—coot, and wild-duck. The birds in New Providence are not remarkable, though numerous in the winter season, when they migrate in large quantities from America—humming-birds, banana birds, and various kinds of small parrakeets; ricebirds, American robin, mocking-birds and thrashers, the last resembling in note the English thrush. In the out-islands small parrots are still found.

Unfortunately, there is no botanic garden in Nassau. Gardening is a laborious work, owing to the winter droughts. The bush contains a great variety of pretty flowering shrubs, and about seven varieties of ferns, and the same of orchids. Most of the cultivated shrubs and flowering trees have been introduced from time to time from Cuba and other parts of the West Indies. Cinnamon and spice grow here, but are not turned to use. A profusion of roses, lilies of various kinds, hybiscus, plumbago, geraniums, with some English seedlings, grow luxuriantly; but hurricanes, though not frequent, are very destructive, and help to keep down a population already poor. It will be a great blessing to the Bahamas if the Sisal-planting succeeds, as it requires but little soil and is not injured by weather.

The stores in Nassau are so much improved that really for all moderate wants they suffice. It is a mistake to try to make a colony like England. Epicures and highly fashionable folk should never leave its shores, for it must be confessed that—guaya jelly and West Indian preserves excepted food in a tropical country is not luxurious, certainly not in the Bahamas; but the necessaries of life are cheap and abundant. It would be a philanthropic, but, considering the nature of the black race, a difficult work to set on foot a school of cookery, and the teacher would need first to master the primitive style of pots and pans. No iron-ranges here; coal as we know it is a thing unknown, except in the Victoria Hotel. Charcoal goes by that name here, and wood-fires are universal—a source of perpetual heartburning between mistress and cook. It would be well for an intending visitor to have some knowledge of cuisinerie, for the race of cooks is dying out fast, the few remaining being relics of 'old-time

Amusements truly are few in Nassau. The one or two English ladies ride. As regards horses, 'handsome is as handsome does;' ergo, Nassau horses are very handsome; they do their duty nobly. A Nassau horse never walks; it is always at full tear, and this on hard roads cut out of solid rock. Dogs are legion; a handsome dog is a curiosity; their concerted barking on moonlight nights, together with the crowing of innumerable roosters, drive slumber far away from weary eyes. In all other respects moonlight nights in Nassau are heavenly. It would be a good work to import a little new blood in the way of dogs; the present race of curs is deplorable. Boating as an amusement is scarcely made so much of as it ought to be; and fishing is almost confined to the trade. Yet fish about the Bahamas are very abundant, various, and extremely beautiful, and form the staple diet of the poorer classes. They are of all colours and

sizes; some of a deep royal blue, some cherry coloured, some silvery spotted with red or striped with yellow, and most of them good eating. Crayfish, crabs, and turtle also abound. Picnics by land or by water are frequent in the winter season.

In closing these few remarks on the Bahamas we must not fail to extol the climate, which scarcely has its equal in any part of the world. Hitherto, this has been its one recommendation, its sole stock in trade; let us hope that Sisal may prove an additional one; but of the two, health is better than wealth, and it is not too much to say that to live is a pleasure in the Bahamas. A more charming climate does not exist, and one only regrets that its distance from England prevents its being more frequented by invalids from thence. It is delightful to wake up day after day to bright sunlight; and it is only when you return to the dear old mother country with its gray skies and tedious winters that you fully realise the charm of a climate like this; free from all epidemics which linger more or less in all the more beautiful southern isles, with a winter lasting from October to May, during which the thermometer never falls below fiftysix degrees, rarely below sixty. Our American neighbours discovered its value long ago, and for many years have made Nassau their winter resort, many hundreds coming in relays to the Victoria Hotel and to other boarding-houses. Their arrival is the signal for such festivities as the island affords; and to their cheerful and genial disposition the Nassovians are not a little indebted for the brightening of their somewhat monotonous life. In fact the great want of these islands is a little more intercourse with the outer world, a little more public opinion, a little shaking out of old grooves, and a little of the large-mindedness which comes from rubbing up amongst our fellow-creatures and from a knowledge of other countries. If they have not all the luxuries of other lands, they have a climate which is a luxury in itself, and which renders many others unnecessary.

Let us hope that the Sisal plant may fill its empty coffers (we have heard that a ton of fibre which was lately sent to England from the Bahamas realised fifty-two pounds), and that it may be found after all that the despised weed is better than Spanish gold; and that a bountiful Providence leaves no spot destitute of resources if diligently sought for and improved.

A DEAD RECKONING. CHAPTER XVIII.

JULES PICOT had been carefully searched before being locked up in his cell, and it was an utter puzzle to the jail officials how he had contrived to conceal about him even so insignificant an article as the tiny phial of poison so as to evade detection. One of the warders, however, of a more inquiring turn of mind than his fellows succeeded, a day or two later, in solving the mystery. The mountebank wore very high-heeled shoes, as many of his countrymen make a practice of doing. The heel of one of his shoes had been so made that it could be unscrewed at will, while inside it was a cavity just large enough

to hold the phial. Picot had evidently prepared himself beforehand for a contingency the like of that which had at length befallen him. The letter written a few hours before his death was in French, and was addressed to 'Madame Brouke.' The following is a translation of it:

MADAME-When these lines reach you, the hand that writes them will be cold in death. I am tired of life, and life is tired of me: this night we part company for ever. I take the liberty of addressing you because of your kindness to my little Henri (whom le bon Dieu has seen fit to take from me for my sins), and because you were so much in his thoughts when he was dying. I also address you for another reason, which I will explain presently.

It was in the first week of the new year that Henri met with the accident which proved fatal to him. He lingered for two weeks, and then died. He had but little pain; life faded out of him like a lamp that slowly expires for want of oil. As I said before, he often talked about his belle madame. He could not remember his mother, and it was your face that shone on him in his dreams, as it were the face of

After he was gone and I was alone in the world, I, too, began to have dreams such as I had never had before. Every night Henri came and stood by my bed, but it was always with an averted face; never would he turn and look at me. I used to try to cry out, to seize his hand; but I was dumb and motionless as a corpse. Then, after a minute or two, he would slowly vanish, with bowed head and name to be to his face, as though he were weeping silently. Then a slowly vanish, with bowed head and hands pressed Night after night it was ever the same. Then a great restlessness took possession of me. I seemed to be urged onward from place to place by some invisible power and without any will of my own. When I rose in a morning I knew not where I should sleep at night; onward, ever onward, I was compelled to go. Last night I reached this place, and this morning I rose thinking to resume my wanderings; but a conversation I chanced to overhear led me to seek the court of justice. You, madame, know what took place there.

Even before I had spoken a word, I knew why my footsteps had been directed to this place, and that my wanderings were at an end. afternoon, after all was over, I lay down on my pallet and fell asleep, and while I slumbered, Henri came to me; but this time his face was no longer averted; his eyes gazed into mine, and he smiled as he used to smile at me out of his mother's arms. Ah, how shining and beautiful he looked! Then a soft cool hand was laid on my brow, that had burned and burned for months, and all the pain went, and I knew nothing more till I awoke.

A word more and I have done. Madame, pray believe me when I say that never could a man be more surprised and astounded than I, Jules Picot, was to-day when I found that it was your good husband who was accused of the death of the Baron von Rosenberg. When I made my way into the court after hearing that some one had been arrested for the murder, I thought to see only a stranger, one whom I had never

seen before. But even in that case I should have done as I did to-day, and have confessed that it was by my hand and mine alone that Von Rosenberg met his death. Conceive, then, my astonishment when in the accused I recognised M. Brouke, whom I had known in London under the name of 'M. Stewart!' I knew that when in London he was in trouble-in hiding-but never did I dream of the crime that was laid to his charge. Had I but known it, you and he would long ago have been made happy by the confession of him who now signs his name for the last time. JULES PICOT.

With what a host of conflicting emotions this document was read by her to whom it was addressed may be more readily imagined than

George Crofton sat alone in his cell, devouring his heart in a bitterness too deep for words. All was over; all the bright prospects of his youth and early manhood had ended in this; his home for years to come would be a felon's cell, his only companions the lowest of the low, the vilest of the vile. 'Facilis est descensus Averno,' he muttered with a sneer. my case the descent has been swift and easy enough in all conscience.' One gleam of lurid joy, and one only, illumined the black cavernous depths in which his thoughts, like fallen spirits, winged their way aimlessly to and fro, finding no spot whereon to rest. Gerald Brooke, the man he hated with an intensity of hatred bred only in natures such as his, was a prisoner even as he was, and it was his, Crofton's, hand that had brought him there! He had but spoken the truth when he said that the hour of his revenge would come at last. It was here now, although it had come after a fashion altogether different from what he had expected. Thanks to his folly, his own outlook was a dreary one enough; but what was it in comparison with the grim prospect that stared his hated cousin so closely in the face! When he thought of this it was as the one sweet drop in the bitter cup which Fate had pressed with such unrelenting

fingers to his lips.

While he sat brooding over these and other matters, just as daylight was deepening into dusk, a warder unlocked the door of his cell. 'You're wanted in the waiting-room,' said the man. 'Your uncle, Colonel Crofton, has called to see you. It's past the hour for visitors; but as he's brought a magistrate's order, and as he says he's obliged to go back to London to-night, the governor has agreed to relax the rules for once.'

Crofton stared at the man in stupefaction. To the best of his belief he had no such relative in the world as the one just named. 'Ah, you didn't expect to see him, I daresay,' continued the warder. 'A nice affable gent as ever I see; but I wouldn't keep him waiting if I was you.'

Crofton followed the man without a word; and after being conducted through a couple of corridors, was ushered into a sparsely furnished whitewashed room, where a middle-aged, well-built man of military carriage, who had been perusing through his eyeglass the printed rules and regulations framed over the mantel-piece, turned to greet him. He had close-cut grizzled hair and a thick drooping grizzled moustache. He wore a lightly buttoned frockcoat, gray trousers and straps, and military boots highly polished. He carried his hat and a tasselled malacea in his hand, and one corner of a bandana handkerchief protruded from

his pocket behind.

'My dear nephew—my dear George!' he exclaimed with much effusion as he advanced a step or two and held out his hand. 'This is indeed a dreadful predicament in which to find you. What, oh, what can you have been about that I should have to seek you in a place like this! Your poor aunt will be heart-broken when she hears of it. I must break the terrible news as gently as possible; but really, really, in her delicate state of health I dread the effect such a disclosure may have upon her.' His voice trembled with emotion; he brushed away a tear, or seemed to do so.

George Crofton had undergone many surprises in his time, but never one that left him more dumfounded than this, for in his soi-disant uncle his quick eyes recognised at a glance no less a personage than Lardy Bill. If at the moment his eyes fell on him he had been in the least doubt of the fact, that doubt would have been dispelled by the expressive wink with which his friend favoured him an instant later. The man's audacity fairly took Crofton's breath

away.

'The first question, my dear boy,' resumed the sham colonel, so as to give the other time to recover himself, 'of course is whether anything can be done for you, and if so, what. I need not say that my purse is at your service; for, shocked as I am to find you in this place, I cannot forget that you are my brother's son. I leave for London by the first train, and immediately on my arrival I will take the advice of my own lawyers in the matter, which will, I think, be the best thing that can be done under the painful circumstances of the case.'

'I suppose that's about the only thing that can be done,' answered Crofton, who was still utterly at a loss to divine the motive of the

other's visit.

The warder who had conducted Crofton from his cell was present at the interview, ostensibly for the purpose of seeing that none of the jail regulations were infringed either by the prisoner or his visitor; but a sovereign having been pressed into his unreluctant palm at the moment he ushered the latter into the waiting-room, he now discreetly turned his back on the pair and stared persistently out of the window.

A little further conversation passed between uncle and nephew, the chief part of it falling to the lot of the former, then the colonel looked at his watch and rose to take his leave. The

warder turned at the same instant.

'As I remarked before, my dear George,' said the uncle as he clasped both the nephew's hands in his, 'however pained—most deeply pained—I may be, everything shall be done for you that can be done. I refrain from all reproaches—at present I can only grieve. But your poor aunt, George—your poor aunt! You are her golson and favourite nephew. Ah me—ah me!'

He walked out of the room with both hands outspread and slowly shaking his head, like a man whose feelings were more than he could control. The jail officials at an early hour next morning, in addition to making the discovery that in the course of the night their French prisoner had taken leave of them after an altogether illegal and unjustifiable fashion, were further astounded by finding that the inmate of cell No. 5 had also relieved them of his preserce, but in a mode altogether different from that which had found favour with the mountebank.

Crofton, unheard by any one, had contrived to file through the middle bar of his cell window and then to squeeze himself through the aperture thus made, after which there was nothing but a high wall between himself and liberty. Beyond this wall were some market gardens, the jail being situated in the outskirts of the town, and then the open fields. Outside the wall, a coil of rope with a strong steel hook at each end was found; and the footsteps of two if not of three men were plainly traceable for some distance in the soft mould of the garden. As to how Crofton had become possessed of the file, and by whose connivance and help he had been able to climb the wall and descend safely on the other side, there was no evidence forthcoming. The only fact the jail officials could affirm with certainty was that their prisoner was nowhere to be found.

At as early an hour as possible on the morning following his capture, Crofton had obtained permission to send a telegram to his wife, and before moon Stephanie was speeding northward by the express in response to his summons. When she reached Cummerhays, it was too late for her to visit her husband that night; so, carrying her little handbag, she walked from the station to the inn nearest to it and asked to be accommodated with supper and a bed. She had ascertained from a constable in the street that the earliest hour at which visitors were admitted to the jail was ten

o'clock.

Next morning, which was that of Saturday, Stephanie rose betimes. While she was eating her breakfast the landlady bustled in, carrying an open newspaper. 'Here's the weekly paper, ma'am,' she said. 'The boy has just brought it; and as it contains a long account of the doings at the justice-room yesterday, about which you may have heard, I thought that perhaps you would like to read it over your breakfast.'

'Thank you very much; I shall be glad to do so,' said Stephanie quietly. She had given no name at the inn, and the landlady had not the slightest suspicion that her guest had any reason for being more interested than any stranger might be supposed to be in the news contained in the paper. Nor, in fact, had Stephanie any knowledge of what had happened. Her husband's telegram had been of the briefest; it had merely said: 'I am in trouble. Come at once. Bring money. Inquire for me at the jail.' But from what she knew already, she guessed, and rightly, that the enterprise on which Crofton was bent when he left home had failed, and that by some mischance he himself had come to grief.

The moment she was left alone Stephanie opened the paper with eager fingers. Her quick eyes were not long in finding the particular news of which they were in search. She read the story of the attempted robbery, as detailed in the evidence, with ever-growing wonder—a wonder that was intensified twenty-fold when she read how

Gerald Brooke had been arrested at the same time as her husband, and by what strange chance the two cousins had once more been brought face to face. But when, a few lines lower down, her eyes caught sight of another well-known name. all the colour ebbed from her face, leaving it as white as the face of a dead woman. She read to the end, to the last word of Picot's strange confession before the magistrates, and then the paper dropped from her hands.

'My father the murderer of Von Rosenberg, and I-I the cause of it!' she murmured in horror-stricken accents. For a little while she sat like a woman stunned, stupefied, her eyes staring into vacancy, her mind a whirling chaos in which thoughts and fancies the most bizarre and incongruous came and went, mixing and mingling with each other in a sort of mad Brocken dance, all the elements of which were lurid,

vague, and elusive. How long she sat thus she never knew; but she was roused by the entrance of the landlady, who had come to reclaim the newspaper, there being three or four people in the taproom who were anxious to obtain a glimpse of it. Fortunately, the good woman was somewhat short-sighted, and perceived nothing out of the ordinary in her guest's appearance or demeanour. But her entrance broke the spell and served to recall Stephanie to

the realities of her position.

For a little while all thought of her husband had vanished from her mind. This second blow had smitten her so much more sharply than the first that the pain caused by the former seemed deadened thereby. But now that her waking trance was broken, the double nature of her calamity forced itself on her mind. 'My father and my husband shut up in one prison !' she said to herself; and it was all she could do to refrain from bursting into laughter. For are there not some kinds of laughter the sources of which lie deeper than the deepest fountains of tears?

Suddenly she started to her feet and pressed both hands to her forehead. 'But why—why should my father have gone to Von Rosenberg to demand from him tidings of me, when I wrote to him from London telling him all that had hap-pened to me and where I was? Can it be possible that my letter never reached him? Had he received it, there would have been no need for him to seek Von Rosenberg. Even after so long a time I could almost repeat my letter word for word. In it I told my father how I had left home with Von Rosenberg, but only after he had given me his solemn promise to make me his wife the moment we set foot in England, I told how, within an hour after our arrival in London, I had claimed the fulfilment of his promise, and how he had laughed me to scorn, thinking that he had now got me completely in his power. I told how I flung all Von Rosenberg's presents at his feet and left him there and then, and going out into the rainy streets of the great city, fled as for my life. I told how I hid for weeks in a garret, living on little more than bread and milk; and how at last, when my money was all gone, I found my way to the nearest cirque, and there obtained an engagement. All this I told my father in my letter, and then I prayed him to forgive me, and told him how I longed to go back to him and my mother. Weeks and months I

waited with an aching heart for the answer which never came. Then I said to myself: "My father will not forgive me. I shall never see him or my mother again." But the letter never reached him. Had it done so he would not be where he is to-day.' Tearless sobs shook her from head to foot.

At this juncture in burst the landlady with an air of much importance. 'As you have read the paper, I thought that maybe you would like to hear the news that one of the warders just off duty has brought us from the jail. Such times as we live in, to be sure !'

'News-what news?' asked Stephanie faintly. 'John Myles has brought word-and he ought to know, if anybody does-that one of the prisoners-Crifton or Crofton by name-managed to break out of his cell in the night, and has got clear away. But that's not all by any means. The foreigner-him as accused himself in open court of the murder-was found dead this morning, poisoned by his own hand. The news will be all over England before nightfall.—Gracious me, ma'am, whatever is the matter!—Mary, Eliza—quick, quick!

THE TOURACOS AT THE ZOOLOGICAL GARDENS.

At the present moment the Menagerie of the Zoological Society, Regent's Park, has an unusually large number of Touracos, a species of birds which has not before been exhibited in this country. Touraco is the native name of a beautiful group of birds peculiar to Africa, and sometimes called, from their food, Plantain Eaters. They are generally supposed to be allied to the Cuckoos, and they are not altogether unlike some of them in their external characters. An African traveller observed so long ago as 1818 that the Plantain Eaters during heavy showers hide themselves in the thickest foliage, as if they had a special dread of getting wet. There is nothing particularly remarkable about this; in fact, many birds show a dislike to getting wet feathers; but the Touracos have a much better reason for this dislike than most other birds. M. Verreaux, the traveller referred to, discovered the reason when he attempted to catch a Touraco which was sheltering itself during a storm of rain: he found that, when he grasped the feathers, the brilliant crimson colouring-matter stained his hands; and later, he discovered that the feathers could be washed almost white. To find colours that 'run' in the feathers of a bird is most unexpected, and it is not surprising to hear that one naturalist who purchased some skins thought himself to have been deceived with artificially painted birds. The colour comes out so readily that when a Touraco is shot and falls into a pool it stains the surrounding water not so much with its blood as with the red dve from its wing feathers. Touracos are not, however, entirely coloured by this peculiar substance; they have a great deal of green about them, and this green is due to the presence of a green pigment which appears to be convertible into the red substance by prolonged boiling. The green pigment, unlike the red, is a 'fast' colour.

Most birds that are coloured green owe this colour, at least partly, to fine markings upon the feathers; and all 'metallic' colours, such as the brilliant greens, blues, and reds of the humming-birds, are due to optical effects caused by the structure of the feathers, and have nothing to do with any pigment of the same colour within the substance of the feathers. There are thus two sources of colour among birds, and it is a remarkable fact that in many cases where the male birds have a brilliant coloration and the females are soberly clad, the colour is a 'mechanically' caused colour; for instance, in the humming-birds. The Touracos do not show this difference between the sexes; the female resembles her mate, and there is no superiority on either side, but an

absolute equality.

What, then, in the first place, can be the advantage to the Touraco of having this brilliant and diverse coloration; and in the second place, why is the red colour so easily destroyed? It is no use nowadays to fall back upon the convenient statement that tropical birds are generally brightly coloured; this in the eyes of most naturalists would be as bad as to tell a physicist that mercury rises in an airless tube because 'Nature abhors a vacuum.' Everything has to be explained, and, moreover, the locks which guard the secrets of Nature have to be opened by keys of a particular pattern, either by skill or by force. In fact, there is a tendency to make one brilliant theory, applicable possibly to the instance which it was advanced to solve, do for all the phenomena which have any visible relation to it. But there is now to some extent a reaction against all this, and some naturalists think that we cannot and need not find a utilitarian explanation for every observed fact. It has been suggested that the red coloration of the Touraco is destroyed by the wet when the bird creeps into shelter, so that its enemies, which are driven by stress of weather into the same shelter, may not see it so easily. This is perhaps a little far-fetched, though ingenious. Another possible explanation is that the Touraco was originally an inhabitant of rainless or comparatively rain-free districts; but then, why should it migrate into districts where its colour was liable to be destroyed? This objection might of course be met by supposing that it is only comparatively recently that this migration has taken place, so that the bird has not had time to adapt itself to its new conditions. But all this assumes that the crimson colour has some definite bearing upon the mode of life of the Touraco. Colour cannot always have a relation of this sort, or else why should so many animals which inhabit the bottom of the ocean, where the darkness must be almost such as can be felt, be often brightly, nay, brilliantly coloured? It is the rule and not the exception for this brilliant coloration to occur in deep-sea animals; if any one doubts it, let him read Moseley's Naturalist on the Challenger.
'Bright scarlet shrimps, deep purple holothurians,' blue crustaceans, starfish, and sponges have been dredged up from abysmal darkness.

Now, it is a very remarkable fact about the Touracos that the red colouring-matter contains a large amount of copper. The existence of copper is not remarkable, for we know that this metal in minute quantities is most widely distributed in animals and vegetables: it occurs in cereals, eggs, and and even in human blood; it is probably absorbed from the soil by plants and transferred to the

bodies of animals which feed upon these plants. But copper is so abundant in the feathers of the Touraco that the characteristic green flame is given when the feather is burnt. It is only in the red feathers that the metal is found. It seems, therefore, as if at least the greater part of the copper taken in with the food ultimately found its way to the red feathers. Perhaps, therefore, the solubility of the red pigment in water is a way of getting rid of the copper, which would otherwise accumulate in other parts of the body to a dangerous extent.

CHARLIE RANSOM.

A STORY OF THE OIL COUNTRY.

ONE afternoon, about the 1st of March, Charlie Ransom's place at the little schoolhouse was vacant, and it soon became known that he was ill. The next day he was so much worse that Steve Smiley was despatched with his buck-board for Doctor Leslie, whose headquarters were at Mesopotamia Cross Roads. The physician pronounced Ransom's sickness a case of brain-fever; and although the lad had gone no further in his studies than the average boy of twelve in a London Board School, there was little doubt that close application to his books and an earnest desire to excel had engendered the fever. Perhaps there was something else which had worried Charlie; but that is a matter of doubt; and even if it were so, not a man or woman in Pan Handle City would have bracketed an affair of the heart with brain-fever in one and the same breath.

Charlie's winter-quarters were in the house of the owner and commander of the Petroleum Gem, who in winter took back, for board and lodging, part of the wages which he paid his first-mate during the summer season. Old Captain Jones and his wife were good enough in their way. Jerry Jones thought there were few boys like the Doll, and would have been very much grieved to lose him. Mrs Jones, too, was rather fond of Ransom, and waited upon his every want-when she knew just what he wanted. But their care and attention were, after all, of a very rough-and-ready character. The old lady regularly administered the medicine left by the doctor, and three times a day tendered the sick man such homely food as formed their own meals. But there was something lacking, a something that could only be supplied by tender, delicate, and loving hands, a something which even Charlie-who had known nothing of a home since he was eleven years oldsadly missed, and the more so as he passed the crisis of the fever and convalescence set in. For, although Ransom was very ill indeed, he did get better, and everybody in Pan Handle City was glad of it. All through the days of prostration and delirium inquiries from his friends had been frequent, and not a few of them had called daily at Jerry Jones's house for bulletins from Charlie's doctor and nurse. Among these was Marie Reese, who missed her favourite pupil more than a little. The first day that Ransom was pronounced out of danger, and while he was very, very weak, Miss Reese begged to be admitted for a moment

When the school teacher stood in the tiny bedchamber she was very much shocked and grieved. The whitewashed walls were quite bare, and there was no carpet, or even a mat, upon the floor. All that the room contained was a rough table, one chair decidedly the worse for wear, Ransom's large trunk, and the narrow cot-bed upon which lay the listless form of the Doll—so changed, that had she not been certain it was he, Marie Reese could hardly have recognised him. The curly hair was dank and tangled, the full ruddy cheeks had become pale and thin, while the bright eyes were sunken and covered by heavily drooping eyelids. Outside the coverlet rested two bony hands, one of which the schoolmistress took in her own, that were so plump and warm. But Ransom never moved, and gave no sign that he was conscious of his visitor's presence. Marie thought that he slept; and as a tear of pity started from her eyes, she bent over the sick lad while her lips pressed upon his cheek a sisterly kiss of sympathy and compassion. It was a pure and innocent caress—a caress prompted by the peculiarly forlorn condition of poor Ransom in his unlovely room. She did not pretend to give any deeper meaning to the kiss, because she felt nothing deeper than friendship for the lad, and would not upon any consideration have had him think so. Her attachment for the Doll was the warm friendship, perhaps patronising friendship, of an elder sister for a younger brother. Marie Reese meant all that she felt; but she meant not one whit more than she felt, for Charlie Ransom. And she knew nothing of the delicious thrill which that simple kiss sent through the pulses of the weary and worn invalid; she knew nought of the effect which it produced upon the poor fellow, who slowly opened his eyes and watched her, with a curious smile of satisfaction upon his face, as she quietly flitted from his room to Mrs Jones's kitchen.

How should she know that her token of kindly sympathy had seemed to the lonely lad, whose heart ached and yearned for more than sympathy, a direct answer to the question which had racked his mind all through the winter? And why should Charlie Ransom—the homeless untrained lad, whose life had been spent amid scenes where education and refinement were chiefly conspicuous by their absence—why should this unsophisticated deck-hand of a little river steamer be different from other men? Why should he be better able coolly to calculate and calmly to judge where men with greater advantages act entirely without judgment and calculation?

Certainly, Marie Reese was at least three years older than the Doll, while the intellectual and social gulf which yawned between them was so wide and deep that a generation of years could not bridge it. But when love's fervid heat sets young blood a-boiling, such discrepancies and inconsistencies become questions scarcely worthy of consideration—nay, they vanish altogether. It was so with Charlie Ransom.

The next day, Marie Reese was again a visitor to the sick lad's room, and this time she did not go empty-handed. Deftly she fastened to the window a muslin curtain which she had begged of Mrs Lamson, and 'without sound of hammer' hung upon the poverty-stricken walls a couple of little steel engravings of which she had robbed

her own room. Upon the table she set a tiny glass vase, in which she placed a bright crocus, the only flower that she could find in the window-boxes of Captain Peter's parlour. But these slight additions made a wonderful change for the better in the 'eight-by-ten' bedroom, and greatly aided the Doll toward a rapid recovery. Then, with kindly skilful hands, that were so different from Mrs Jones's, the schoolmarm arranged Ransom's pillows, talking to him cheerily the while.

'Now, Ransom,' she said, as she prepared to go, 'is there anything I can do for you—anything?'

'Yes, Miss Reese; there is something I should like, I should like you to give me, or lend me if you can't spare it, your picture. Will you, marm—and set it right by the table yonder?'

'I will see what I can do for you,' said Marie.

'Is that all?'
'No, miss; there is something else. I have never heard you sing; but I somehow fancy that you can if you try. Will you sing me something the next time you come? I like music—had a notion once to learn it myself, and there's a bit of

a banjo in my trunk.'
'Well, well! You have Mrs Jones get the banjo out, and I will see if I can manipulate it. Good-bye until to-morrow.'

To-morrow came; and after school, Marie went over to see her patient, as she now called the Doll. She entered the room very noiselessly; but Ransom was wide awake, and eagerly watched her as she deposited upon the table a small Oxford frame containing a portrait of herself. By the side of the trunk lay a cheap banjo, which Marie took up, picking over the strings with the fingers of an expert. She played the instrument as easily and as naturally as a New Orleans darkey, and charmed her listener with a long repertoire of songs that included Annie Laurie and The Siranee River. She was about to lay down the banjo, when Ransom brought forth from under his pillow a small sheet of music and some printed verses. It was a hymn-tune arranged for the banjo, and the words were those of an old-fashioned Methodist revival hymn, To Marie it seemed a curious enough melody for a banjo; but Ransom begged her to play it.

'It's the only tune as I ever learned to sing, Miss Reese, and it's the only tune I ever tried to play, though I never quite managed that. I kinder like it, 'cause they sung it the only time mother ever took me to church in the old days at Pittsburg.'

When Marie read over the accompaniment as printed, there seemed to her very little music in the tune; but she rendered it in a setting of her own, and sang in her sweet soprano voice:

My heav'nly home is bright and fair; Nor pain nor death can enter there; Its glittering towers the sun outshine; That heav'nly mansion shall be mine.

She went through all the verses; and to Charlie Ransom the singing of that simple old hymn seemed the most divine music he had ever heard. Always after that, when Marie Reese called to see him—which she did every day until he was well enough to get about a little—he coaxed her to sing for him the 'heavenly mansion piece.'

But if those days of convalescence were as a sweet and happy dream to Charlie, he experienced a very rough and sudden awakening upon the very first day that he was able to leave the house.

During the last week of March, Pan Handle City began to awaken from its state of winter lethargy. The ice was slowly disappearing from the Tomhicken Creek, and the first downpour of rain would create a flood, more or less severe, that would soon wash the last vestige of ice and snow from the lowlands of the Valley. Even now, Captain Jerry Jones was busy each day, oiling, greasing, tarring, and washing each nook, corner, and working part of the Petroleum Gem, in anticipation of a rushing spring business. owners of wells were getting ready innumerable barrels of oil for shipment down the river; and those who had failed to secure legitimate vessels for transporting their output were engaged in constructing rafts of sundry designs and dimen-Even the women were busy, preparing for that annual phenomenon known as 'spring cleaning, which not even the primitive homes of Pan Handle City could escape. Down at the school Marie Reese had her hands full; for before the end of April the school-year would close, and while the schoolmistress did not purpose to return to the settlement in the autumn, she wanted to complete all the work she had mapped out for herself when she undertook the task which she had, thus far, so faithfully performed.

With these many signs of activity about him, Charlie Ransom felt like a drone in a hive as he strolled out in the feeble sunshine of a March afternoon. Partly from inclination and partly from force of habit, Ransom wended his steps toward the schoolhouse, where his arrival was not the only surprise to which the scholars were to be treated that day. The schoolmistress insisted upon the Doll occupying her chair, which was the only comfortable seat in the room. Of course Ransom disliked to deprive the teacher of her seat, and made some protest; but he yielded at last. As he sat by the side of the little desk, he felt more than pleased at so signal and public a mark of personal kindness from the woman for whom he would have cheerfully drained each drop of his life's blood.

It was well-nigh time for the dismissal of the scholars, when a horse was stopped at the door of the schoolhouse, where its rider dismounted. A moment later, a fine handsome man of thirty-five in coat and riding-breeches strode up the little aisle of the schoolroom. He displayed not the slightest sign of bashfulness in his manly bearded face, and he walked with a quick firm step, which seemed to indicate that his only immediate object was to reach as speedily as possible the pretty blushing woman whose hand rested upon the unpretentious desk, with sensations which were not-and never could have been-understood by the amazed pupils, both big and little. Totally oblivious to the half-hundred spectators, the stranger grasped both the schoolmarm's hands in his own, and actually bent his head down until he almost touched the beautiful face with his moustache. Indeed, it was afterwards distinctly alleged by all who witnessed the performance that the gentleman undoubtedly intended to kiss Miss

Reese, and would have done so had she not prevented him.

'Why, John Burlington, I am ashamed of you, sir! Have you no respect for the dignity of my position in this place? Can you not wait half an hour?'

'Well,' said the handsome stranger as he slowly drew back and released one of the little hands—'well, yes; I can wait as much as half an hour, but not a minute longer. Having discovered you in your hiding-place, I assure you that I intend to demand a speedy reward.—Introduce me to your scholars, Marie,'

To Marie Reese the appearance of Mr Burlington was as much a surprise as it was to the scholars, and as she felt quite unable instantly to collect her scattered thoughts and plans, she was glad of the respite which a compliance with the gentleman's request afforded. So she tapped upon her little bell and, rather confusedly for her, said: 'This is my friend, Mr John Burlington of Philadelphia. I believe he has a few words to say to you.'

'Yes,' said Mr Burlington, closely following the teacher's words; 'and as you-no doubt all of you-consider Miss Reese your friend, you must count me in on the same footing. Because, you see, Miss Reese is my very best friend, and-I don't know whether I am telling an old story? -I have come down here expressly to hurry her away from you, as she has promised before long to become Mrs Burlington, Now, I am greatly interested in this school; and if your teacher will let me, I am going to give a few prizes. See! Here are two twenty-dollar gold-pieces and two ten-dollar gold-pieces. I shall give these to Miss Reese, and she must award them as prizes,-Now I shall take upon myself to dismiss the school for to-day.

The fifty up-turned faces brightened with happy smiles or expanded with broad grins as John Burlington clinked the large gold coins, and there was a loud buzz of chuckling and chattering as the pupils slowly dispersed.

But there was one face in that room which had not brightened much during the few minutes that had elapsed since John Burlington's sudden entrance. In the teacher's chair sat Ransom, all his golden hopes shattered and dispelled by the public assertion of the stranger-a bold and unmistakable statement which had passed uncontradicted by Marie Reese. Yes, the fool's paradise into which Charlie had so lately wandered had now become transformed into a dismal swamp of cruel and bitter disappointment. He gazed and listened like one in a trance or, rather, a dreadful He wanted to leave the horrible nightmare. place that seemed so close and stifling, and yet, when the opportunity came for him to go with the rest of the scholars, Ransom remained in his seat. He never knew why he did so, but at the last he was still there, while close beside him stood the woman whom he madly and insanely loved-her hand clasped in that of the man of her choice.

But, as Marie had never dreamed of the Doll's unspoken hopes and anticipations, and had been utterly unconscious of the effects of her compassionate kiss, so she was now quite ignorant of the misery which had taken up its abode in the mind and heart of Charlie Ransom. 'John,' said Marie, who had recovered somewhat from her surprise, 'this is Ransom, whom I have mentioned so frequently in my letters. You know he has been very ill, yet I think he will secure one of your prizes—one of the large prizes, too.' Then, turning to the Doll, she added: 'Ransom, Mr Burlington has introduced himself so well that there is nothing left for me

to say.

Very warmly, honest and happy John Burlington grasped the young fellow by his thin hand. 'Mr Ransom,' he said, 'you don't look very strong: I fear you have had a hard siege of sickness; but I hope you will soon pick up. I have to thank you, I am sure, for looking so well after Miss Reese. I have heard all about your kindness shown to her in many ways. You will have to come down to Philadelphia next winter and pay us a visit; but as I am soon going to rob all you Pan Handle City folks of Miss Reese, I should like to give you, right here, a little bit of a keepsake from both of us.' Mr Burlington unfastened from his waistcoat an elegant gold watch—his own—which he handed to Ransom. 'No; take it,' he said, as Ransom hesitated; 'don't imagine you are robbing me at all.'

'Yes, take it, by all means,' added Marie, who knew that Burlington would feel hurt if the gift should be refused. 'You know, you wouldn't have liked me to say "No" when you were so good

as to give me the skates.'

So Ransom took the watch and mechanically thanked the giver. But as he walked away, his heart became hardened with disappointment and wounded pride and jealousy and all the wretched feelings that follow in their train. He hated the man who had secured the love of Marie Reese, and he would have liked to hurl back his gift. He longed to smash the watch into a hundred pieces; but he carried it to his room and put it clear down in the bottom of his trunk, where he vowed it should lie buried until the schoolmarm's departure from Pan Handle City, when he would drop it into one of the deep pools of the Tomhicken Creek.

Well, Charlie Ransom was only a lad, and the few years which he had lived had been pussed in a corner of this world where human nature is very human. As he reviewed the events of the winter, and then thought upon his present wretched position, he failed to understand why disappointment should be for him and happiness for John Burlington. Charlie Ransom was no

philosopher.

The reader will have understood ere this that the main portion of Pan Handle City was on the north side of the Tomhicken Creek, across which there was no bridge of any kind. But along the south bank there were three or four wells, none of which were very profitable either on account of the quantity or quality of the oil extracted from them. Captain Peter Lamson owned one of these unproductive wells on the south side of the creek, and as soon as spring opened he resolved to have it 'shot.' 'Shooting' a well is a process peculiar to the Oil Country. There are in the oil regions several distinct strata of 'oil-sand,' and between these strata of sand there are layers of rock. These sands are saturated

with petroleum, and are pressed by the layers of limestone rock, which the oil cannot penetrate. When the oil-well drill passes through the first limestone stratum, the immense weight of the rock upon the oil-sands causes the petroleum to rush upwards through the hole or well made by the drill. When a well is drilled into the first layer of sand, it is only a question of timesometimes days and sometimes years—when the oil in that vicinity 'gives out,' and the quantity which can be pumped perceptibly diminishes. But a torpedo of nitro-glycerine or dynamite 'shot' to the bottom of the well and there exploded will generally shatter the next layer of limestone, and so cause a fresh flow of oil from a lower stratum of sand. There are men—reckless fellows, usually, who carry their lives in their hands-who make a business of 'shooting' wells. It may be readily imagined what a frightful risk the 'shooter' runs in filling the nitro-glycerine shells and lowering them into the wells. Upon the upper end of the last shell is fastened an ordinary gun cap; and then an iron cylinder weighing about six pounds is 'shot' at a fearful rate down the well-often fifteen hundred feet deep—and the deed is done. The noise of the explosion is seldom heard; but the success or failure of the 'shot' is soon determined, for a successful shooting results in a terrific flow of oil, which for the first few minutes scatters about the debris of the explosion, consisting of shattered cartridge shells and pieces of rock and sand, Two or three days after John Burlington's

advent to Pan Handle City, when he had taken up his quarters for an indefinite period in Tommy Van Horn's house, Captain Peter's well on the south side was 'shot' with wonderful success, and the oil flowed out in a huge stream to a height of twenty-five feet. The 'shooting-fiend'—as the operator of the torpedoes was generally termed—had come over specially from Bradford in his light wagon, purposely constructed for the transportation of himself and his dangerous materials and tools. No one accompanied him; but the Captain and the oilmen were on the south side, where they stood at a respectful distance from the well until the 'shot' had been fired. Then the 'fiend' returned to his wagon, leaving the revivified well to the care of its owner and

friends.

Now, it so happened that a few minutes after the torpedo operator had landed and driven off in his wagon, two men sauntered down to the riverside. One of these was John Burlington, and the other was the Doll. Both had intended visiting the scene of the excitement across the creek; but when Ransom guessed the other's intention, he drew back, as he had no desire to be the com-

panion of a man whom he hated.

This was Burlington's first visit to the oil regions. Everything about him was strange; and with true American instinct he endeavoured to learn all that could be learned and to see all that could be seen. There had been a severe drain upon the small floating craft that morning, and the boat which the torpedo-man had just vacated was the only one then available on the north side of the creek. As the boats were to a certain extent common property, Burlington entered this one. As he seated himself and adjusted the oars in the rowlocks, he noticed a very ordinary-

looking tin can, painted red, but he gave it no second thought. It did not belong to him, and as it was not in his way, it might remain in the bottom of the boat.

Ransom, who was standing perhaps twenty yards away, also saw the red can; but, unlike Burlington, he knew full well that it contained some of the deadly nitro-glycerine-knew that it was a can which the 'shooting-fiend' had, in his hurry to get away, forgotten. He knew, too, that the creek was full of huge masses of ice which the spring thaw had loosened. Ransom was perfectly aware of all the dangers which Burlington hazarded in crossing the swollen creek, and was quite conscious of the awful possibility of a collision, in which case the boat and its occupant must meet with total annihilation. All this Ransom knew, yet uttered never a word of caution. What was it to him? He did not place the can in the boat; the dynamite was not his, nor the boat either, neither was he responsible for John Burlington's safety. Why should he seek to prevent an accident to the man who had robbed him of his peace of mind, of his pleasant aery castle, of that which had been paradise to him, even though but a fool's paradise? On the other hand, why should he not let this handsome and refined City manthis peculiarly favoured son of fortune-go right on into the very jaws of death? If Burlington were dying, drowning beneath his eyes at that moment, it is doubtful if the Doll would have stretched forth a hand to save him. Why should he? Why should he? Over and over in the course of twenty seconds Ransom asked himself these and similar questions, and all the time Burlington was slowly rowing out into the dangers of the swollen stream. No; he would not interfere. If Burlington should die, so much the better: wildly he thought that such a catastrophe might give him one more chance to win the love of Marie Reese; and if he failed, she certainly would not then be for John Burlington.

Suddenly there was a peculiar noise and a strong concussion, which severely shook Ransom. He knew what it was, for he saw before him the foam upon the seething, bubbling water, where an instant before the little boat had been. But the boat and the man who was rowing it had dis-

appeared.

A BIDDING WEDDING.

AN OLD WELSH CUSTOM.

THERE are few districts in the United Kingdom in which there are not some customs peculiar to the locality, many of which have come down from 'fable-shaded eras,' some of them betokening by their rudeness and simplicity that they have altered little since the 'merrie days of old,' when men carried out in their sports and pastimes something of the warlike spirit of the age. Some of these customs are traced by tradition to a more or less authentic origin, while others go so far into the misty regions of the past that no legend remains to tell us of their source. It must be allowed that some of these practices were rude and objectionable; but some, again, are so attractive in their quaintness and sim-

plicity, bringing up reminiscences of all that was most admirable in primitive times, that it is with something like regret that we see them falling into disuse in this era of social progress. In no part of Great Britain have greater changes taken place during the reign of Queen Victoria than in Wales, the great development of mineral wealth having caused large towns to spring up where formerly a few scattered farmhouses and shepherds' huts dotted the green mountain sides. There are still, however, many sequestered valleys where the sound of the steam-engine has never been heard; where the rustic natives hold the even tenor of their way much as their fathers did of yore, careless of the noise and bustle of the world that lies beyond their native vale. In certain parts of Pembroke and Carmarthen,

one of the quaintest of marriage customs used to be prevalent, and it is said still to linger to a certain extent in some of the more remote valleys, but now curtailed and shorn of its pristine surroundings. This was known as a 'Bidding Wedding,' and was so redolent of patriarchal roundings. times, that it may be interesting to describe what is destined soon to become a mere memory of the past. Tradition is silent as to the origin of this custom of Cambria, so we may presume that it goes a long way back indeed. The conditions necessary to carry it out could only be possible in a district where the inhabitants were rooted to the soil, where the farms and holdings descended in unbroken succession from father to son; and where no interlopers were allowed to usurp the rights of the native population. To illustrate this, we will endeavour to describe a Bidding Wedding as carried out forty years ago, when the institution was maintained with all its original characteristics. The details were given us by an intelligent native of the district where it prevailed, so that they may be relied on as correct in every respect.

In the first place, all who received invitations were expected to show their respect to the bride and bridegroom by bestowing such presents as befitted their station and means. We may remark that these weddings were generally restricted to the farmers and others of the more respectable class, so that to have a Bidding implied a certain social status, and that the young couple were both come of respectable families.

When two of this class made up their minds to get married, the first thing considered was who were to be invited to the festivities, a list being made out, varying according to the number of their friends and neighbours, from forty or fifty to upwards of two hundred. Invitations were written or printed, and sent round to all those whose presence was desired. After these had been despatched, the next thing was to send round the 'Bidder,' there being one person who filled this important post in every district. The duty of this worthy was to go to all places where invitations had preceded him, there to advocate the claims of his clients to the best of his ability. The Bidder, as may be supposed, was generally a noted character, the local wit and orator, as no one could hope to fill the responsible position who had not 'the gift of the gab.' In some instances females held office, for which they were doubtless as well qualified as their male rivals. These functionaries were generally cordially received,

and were in the habit of specifying any particular articles that they thought desirable, generally fixing their requests high, on the principle that they who asked for a sheep were likely to get a lamb at least. On completing the round of calls, the Bidder gave in his report to his employers. The presents were sent before the wedding to the house of the bride, when a large company assembled to view them and discuss their value. From the fact that intended presents were all entered on the Bidder's book, there were seldom too many articles of one sort; a business-like proceeding which the fashionable world of to-day might copy, as an advance list might save them from having so many 'repeats' in their marriage presents. The articles sent on those occasions were of the most varied description: a cow or a fat pig from some of the more wealthy; sheep and fowls; articles of furniture; bedding and crockery; so that the young folks had little occasion for expenditure in furnishing their house.

In addition to the presents, there was another source which went to enrich the young couple, and served to give them a good start in matri-monial life. This was known as the pwyths, or payments, which consisted of a certain amount of money previously received by the payer on his or her marriage from relations of the bride or bridegroom. These payments were looked upon as debts of honour to be repaid when called upon; and when any were due, they were sometimes reminded of them in the letter of invitation. On the night of the wedding these amounts were received, when some one was appointed as clerk to make a list of all the payments. This list was carefully preserved, that the married pair might know to whom they were indebted, so that they might repay the amount when called on in turn on a similar occasion.

The procession to church was highly striking and picturesque in character; and even in the marriage ceremony there were peculiar forms suggestive and original. One in particular was always watched by the company with great interest, as it was in some measure indicative of the social status of the bridegroom. When the clergyman was engaged reading the marriage service, the bridegroom took from his pocket a sum of money and deposited it along with the wedding-ring on the Prayer-book. From this sum the clergyman deducted his own fee and the clerk's, and then handed over the remainder to the bride. It is said that one clergyman, probably an Englishman, pocketed the whole amount, till the clerk told him what the custom was, when he was forced to 'fork out' again and tender an apology to the fair bride.

After the marriage ceremony, the party wended their way back to the residence of the bride's parents. As most of the company were generally on horseback, a race ensued, somewhat in Eastern fashion, in which some of the party were almost sure to come to grief; but such disasters were never suffered to interfere with the hilarity of the company. A tradition of a tragedy in connection with this custom tells how the bride, reputed the fairest maid in all the district, was killed by being thrown from her horse on the way back from church. It is said that the event is recorded in a country churchyard in Carmarthenshire, the stone bearing the date of 1765.

In this and some of the adjoining districts of Pembrokeshire the Welsh language is almost unknown, the inhabitants consisting mostly of the descendants of a colony of Flemings who settled here early in the sixteenth century. The Bidding, however, seems to be of native Welsh origin; and it is said that very similar customs prevail in Brittany, where the inhabitants both in manners and language bear a much closer resemblance to the Welsh than any of the other branches of the Celtic race in the British Islands.

On returning from church, dinner was placed on the table, after which the 'best-man,' who was there termed the 'tailor,' took the management of affairs, and exerted himself to bring in money from the guests, to swell the fund for the benefit of the wedded pair. For this end beer was provided, which he retailed to the company in defiance of the excise. Large quantities of buns or wedding-cakes were also vended, the young men treating their sweethearts liberally with these. When trade seemed to be falling off, the 'tailor' would propose having a 'scot,' which consisted in himself putting down a shilling on the table, when most of the men would follow his example, some of the more liberal going as high as half-a-crown. These 'scots' would be repeated several times in the course of the night, in proportion as the mirth and glee grew fast and furious, so that what with these and the pwyths and presents, there was generally a good sum raised, if the young couple were at all popular with their neighbours. It is said that upwards of one hundred pounds has been known to be raised on one of these occasions, certainly a good help for a young farmer or tradesman to begin married life with.

Such was a Bidding Wedding as it was carried out in some of the romantic valleys of ancient Cambria in the days of lang syne. Though they may still be occasionally met with, they are now shorn of most of their ancient glory, and destined soon to become a memory of the past. The changed conditions of modern life render them impracticable, and the fact that they have been so long kept up is an illustration of the tenacity with which the Welsh people cling to old customs. These Biddings were certainly calculated to keep up a feeling of sympathy and true neighbourliness, and to engender peace and good-will in the district where they flourished.

WITTY FOLKS: A DULL MAN'S PROTEST.

I am a dull man, naturally slow and dense in my mental grain, my friends tell me, yet not without my uses in the world; one of which, I sometimes suspect, is that of serving as a butt for the witty sallies of the more brilliant members of our small community. Ours is a quiet little town, embosomed in wooded hills, which rise with gentle swell from out a wide expanse of rich undulating well-cultivated country. A simple, homely, monotonous place it is, with few except commonplace interests, with no special charm to boast of, except what lavish Nature drops from her full hand as the seasons pass over us. Each May-tide she touches with subtle beauty the blushing blossoms of the apple-trees, and wreathes

the hedgerows with fragrant hawthorn. She brightens with vivid emerald the woods and fields; and paints with tints of varied loveliness even the little patches of lichen that cling to the time-worn walls of our antiquated comfortable dwellings. These dwellings offend against every rule of architectural taste, and yet serve their purpose as well as if the best architect in the world had designed them. Even in winter they look cheerful and inviting, fenced in as they are from the cold winds with tall clumps of evergreen, laurels and hollies, and here and there a closely clipped hedge of yew, beneath whose sheltering screen a sunny border spreads. There the first-born flowers of the year, the early snowdrops, peep through the frost-bound earth like rows of pearls, and crocuses unfold their golden cups in the feeble sunshine, and fragrant violets scent the rough March gales. There, in summer, bloom sweet old-fashioned roses and clove carnations, filling the air with delicious old-world scents; and in autumn, tall dahlias wave over vivid patches of scarlet geranium and gay calceolarias.

Naturally, our wit partakes of the bonhomie of our simple unsophisticated life; it has a ring of Sleepy Hollow about it; it is racy of our green hill slopes, of our showers of apple-blossom, of the resinous breath of our fragrant pine-woods, doubt much if even Major Macnab, whose special victim I am, could have the heart to say to me what Voltaire once said, when introducing to a large company a certain individual of no great parts whose name was Adam : 'Monsieur Adam, gentlemen; but by no means the first of men.'

No; even the Major, free-lance as he is, is seldom out and out ill-natured, unless when a fit of gout is impending. Then he once said to me, at Mrs Coupelle's too, to make the matter worse: 'My dear Slocum, I never saw you looking better, or any other man looking worse.'

Every morning, as I saunter along slowly under the tall lime-trees which shade the road leading to the station, which is the favourite promenade of our notabilities, I meet the Major. A man he is of grand bearing, tall, erect, with a thin proud saturnine face, a large aquiline nose, and a grizzled moustache. Of a morning he is always to be seen tightly buttoned up in a long surtout, with an old-fashioned black stock round his neck, which gives him a peculiarly stiff uncompromising look. As he marches along, I can see by the puckering of the crow's-feet at the corners of his eyes and the twitching of his thin lips that he is meditating some half-dozen jests all more or less bitter. 'How are you, Slocum?' he cries out, in such a frank, genial, open-hearted way, that, well as I know him, it almost puts me off my guard, and I have desperate thoughts of throwing myself on his mercy, knowing as I do that I am to meet him to-night at the house of a mutual friend, and that two other witty members of our small world are also to be there. I know full well what I must go through, before, buffeted and bewildered by the nimble strife of tongues around, I shall have leave to subside at last with a couple of comfortable dowagers, and a battered old fogy like myself, into the safe but by no means always serene refuge of the whist-table; for I am—well, I don't mind admitting, that as a whist-player many may be better than I am, but few can be worse.

A few steps farther on, where the passing sunbeam glistens on the ivy-covered gable of that handsome Elizabethan house, our lawyer steps briskly out into the street, a prosperous, pushing, self-satisfied man, who so much affects the society of wits that among us he passes for one; although, as the Major sometimes says savagely, 'He is not only dull himself, but is a cause of dullness in others.' His wit is second-hand; it has a legal and forensic cast; and as I seldom come to grief by it, I have an amazing relish for his old oftentold stories. If Mr Monypleas has a weakness, it is for great folks; and he often introduces us of an evening to very fine company indeed. good things are the smart sayings of Lord Chancellors, Judges, Attorney-generals, and such-

As I saunter indolently on under the spreading lime-trees I wonder what he will give us to-night. Will he tell us of the Welsh judge who was famous alike for his neglect of personal cleanliness and his insatiable desire for place, and who once upon a time was addressed by a friend in the following flattering terms : 'My dear sir, as you have asked the Prime Minister for everything else, why have you never asked him for a piece of soap and a nail-brush?' Or how Lord Ellenborough during a severe winter was so annoyed by the con-tinuous coughing in court, that after a good deal of fidgeting about in his seat, he availed himself of the first lull in the bronchial storm to say severely: 'Some slight interruption one might tolerate; but there seems to be an industry of coughing here.' Or when a young barrister, making his first appearance in Westminster Hall, began: 'My lord, the unfortunate client for whom I appear' (hesitation and long pause)—
'My lord, I say the unfortunate client'—another -another prolonged pause, broken by his lordship observing in an encouraging tone: 'Go on, sir—go on; so far the Court is with you,'

Mr Monypleas bubbles over, indeed, with Lord Ellenborough, and has a whole treasury of his smart sayings. Preston, a great conveyancer, was a very uninteresting speaker, and having inflicted upon the Court a speech of portentous length and inconceivable dreariness, he asked when it would be their lordships' pleasure to hear the remainder of his argument. Lord Ellenborough, with a sigh of resignation, answered: 'We are bound to hear you; but as for pleasure, that has long been out

of the question.

The same learned judge, when he heard that Lord Kenyon, whose miserly proclivities were well known, was about to leave a world in which his chief enjoyment had been the acquisition of money, exclaimed in a tone of surprise: 'Kenyon die! Why should he die? What will he get by that?'

Lord Camden comes next, and we hear how, being on a visit to his friend Lord Dacre, they while out walking passed the parish stocks. 'I wonder if the punishment is physically painful?' quoth Lord Camden. 'You had better try it,' said his friend, Whereupon the Lord Chiefjustice sat down, put his feet in the holes, and observed complacently: 'Now, Dacre, fasten the bolts and leave me for ten minutes.' Lord Dacre at once complied, and sauntered off; but being a very absent man, he forgot to return, and Lord Camden was left in the stocks not for ten minutes

but for ten hours. He became faint and giddy; he was devoured by a raging thirst; as the long day went on, the pains in his cramped, confined limbs grew agonising. In vain he besought mercy from the passers-by, and informed them that he was no common convicted culprit, but Lord Camden, the Chief-justice of England. They laughed in his face. 'You are mad with liquor,' said one clerical Levite who passed by on the other side. 'I hope thy punishment will prove for the good of thy soul, said one good Samaritan, a farmer's wife, and to that end, and that he might not die of thirst, she presented him with a juicy apple. He was more dead than alive when he was at last released and carried to Lord Dacre's house.

Then we hear with much interest, for we are a prudent and frugal race, of the thrift of Lord Chancellors and their ladies. Lord Hardwicke was so famous for his overweening frugality that it won for him the sobriquet of 'Judge Gripus.' His lady had the same tastes as himself, and refused to allow her husband to accept an earldom until his daughters were married; for, said she, 'although ten thousand pounds may be thought a very fair fortune for Miss Yorke and her sister, not less than twenty thousand will be expected with Lady Margaret and Lady Betty.'
Our third wit is Mrs Coupelle, a handsome,

buxom, Juno-like dame, who is-as even the other ladies, who detest her, are compelled to own-a very fine woman indeed-fine in person, fine in dress, fine in all her surroundings; for she is a well-dowered widow, and is in the matter of expenditure a law unto herself. She does not affect simplicity or go in for economies of any kind. Rich sumptuous surroundings become her, and she knows it; so do somewhat theatrical attitudes, and she uses them. I know exactly how I shall find her to-night, superb in black velvet and diamonds, with her beautiful fair hair gathered into a mass of light fluffy curls above her brow, the whole coiffure finished artfully off with a plait which has the appearance of a coronet. Her large lustrous eyes, as innocent-looking as the blue forget-me-nots in the meadow, will meet mine with a soft pensive expression, which I have learned too well to interpret. A rustic romance, you say, an idyll of country life full of chivalry and tenderness—the old, old story, with poor foolish Tom Slocum for hero. Bah! the lady has not one vulnerable spot about her; she is armed at all points. There is no joint in her harness of mail. Even Major Macnab is afraid of her, and has never once ventured so much as to attempt to take her off.

Is she clever? I do not know. She is quick of eye and ear, and talks sometimes as if she were indolently conscious that life has high ideals, and even common-place duties; but, unfortunately, all things in the world seem to turn towards her their ridiculous side. When she speaks gravely, as she sometimes does, a mocking banter seems to lurk in her tones, and she is, according to her varying moods, by turns unfeelingly mischievous, and passably good-natured; one moment full of the most delightful oddity and fun, the next uttering a sarcasm so bitter that even the Major is appalled; his scalping-knife is never so utterly pitiless even in his worst fits of gout. Shrewd she is and penetrating, yet easy and pleasure-loving

strangely charming, brightening everything she touches with her flashing gleams of wit, as the sunbeam gilds for a moment the brown furrows in the muddy fields.

I have been just to her; for I am impartial, as slow men often are; and yet, of all my tyrants, she is the worst. I know that she laughs at me outrageously and unmercifully, even to my face; and yet I can in no way help myself. I cannot even avoid her. In her presence, a curious spell, which I am powerless to resist, is upon me. From the farthest corner of the room, a single glance of those bright laughter-loving eyes is sufficient to sweep me to her side, a helpless, unresisting victim. She greets me with a sunny smile, and holds out a soft warm hand, and my martyrdom begins, and I wriggle and writhe in my shame-faced anguish till the whist-table is set agoing, when I subside with a stifled sigh of thankfulness into a chair opposite Lady Rorison, a dear stout motherly woman, who knows that, after a dose of Mrs Coupelle, the patient requires rest. As the widow of a distinguished officer who was knighted for his services to his country, her ladyship of course fares better at Mrs Coupelle's hands than I do, who am only plain Thomas Slocum, of no place, and nothing in particular; still, there is that in her ladyship's configuration, mental and physical, so provocative of the lively widow's mirth, that she could never quite escape her Par-thian arrows, even were she Queen of Sheba. As it is, she also has suffered; and she glances at me over her spectacles with a compassionate fellowfeeling, and is patient with my mistakes.

I wonder, in my slow way, between the pauses of the game, what sort of time of it the late Mr Coupelle had with his superb partner. I never saw him; he had died before my aunt left me the comfortable house and comfortable income which procured for me admission into the somewhat exclusive circle of which Mrs Coupelle is the bright peculiar star; but I have heard of people being tickled to death. Is it possible, I wonder, for people to be laughed to death ?-to have all strength and spirit crushed out of them by the unceasing flow and sparkle of their companion's wit ?- much as the sun drinks up the dew, which is like lifeblood to the thirsty earth.

The wind rustles as I walk through the sere leafless branches of the limes. I watch the wan winter sunshine as it flickers over our peaceful churchyard and warms into quiet beauty the lovely grayish-green lichens that cluster over the old stones of its wall. For him who was once Mrs Coupelle's husband, the supreme tragedy of life is over, the problem of existence is solved. We speculate and doubt; he knows. No earthly care or disquietude has power to ruffle his ineffable calm; yet I cannot help wondering, as I walk, with that lack of all attention to logical sequences which is natural to me, if it does not seem hard to him that he should be lying there in that wintry corner, with the chill radiance of the December sunlight coldly gilding the splintered peaks of his costly granite monument, while she sits warm and bright in the glow of the firelight, and her gay laugh rings out clear above the nimble encounter of wits, and her quick thoughts find for themselves winged words of fire that fascinate even while they sting. Life has no sad burden for withal, shy of friendship, careless of love, yet her; she dwells amid its flowers; her days are as

bright now as ever they could have been in the golden light of the years that are gone. It is all as it should be, no doubt, and yet the contrast strikes me with an odd sort of vicarious indignation. I am gradually, in my slow way, warming up to be angry, when there she is before me as if she had dropped from the wintry clouds. Sure no blush of spring was ever so sweet as the exquisite peach-like glow that mantles in her cheeks; her hair glitters in the sunshine with a sheen as of gold; her red lips curve with a smile of joyous welcome; she holds out a kind hand to me, and I am happy. Life has its exquisite moments even for me. To-night, no doubt, I shall repent and do penance for my folly. I am a fool, I admit it; but then folly can be so sweet—so much sweeter, sometimes, than wisdom.

CONCERNING THE GOOSE.

The goose figures largely in the history, the legends, and the proverbial lore of our own and other lands. In ancient Egypt it was an object of adoration in the temple and an article of diet on the table. The Egyptians mainly took beef and goose flesh as their animal food, and it has been suggested that they expected to obtain physical power from the beef and mental vigour from the goose. To support this theory, it has been shown that other nations have eaten the flesh of wolves and drunk the blood of lions, hoping thereby to become fierce and courageous. Some other nations have refused to partake of the hare and the deer on account of the timidity of these animals, fearing lest by eating their flesh they should also partake of their characteristic fearfulness and timidity.

Pliny thought very highly of the goose, saying 'that one might almost be tempted to think these creatures have an appreciation of wisdom, for it is said that one of them was a constant companion of the peripatetic philosopher Lacydes, and would never leave him, either in public or when at the bath, by night or by day.'

The cackling of the goose saved Rome. According to a very old story, the guards of the city were asleep, and the enemy taking advantage of this, were making their way through a weak part of the fortifications, expecting to take the city by surprise. The wakeful geese hearing them, at once commenced cackling, and their noise awoke the Romans, who soon made short work of their foes. This circumstance greatly increased the gratitude of the Roman citizens for the goose.

We gather from the quaint words of an old chronicler a probable solution of the familiar phrase, 'To cook one's goose.' 'The kyng of Swedland'—so runs the ancient record—'coming to a towne of his enemyes with very little company, his enemyes, to slyghte his forces, did hang out a goose for him to shoote; but perceiving before nyghte that these fewe soldiers had invaled and sette their chiefe houlds on fire, they demanded of him what his intent was, to whom he replyed, "To cook your goose."

In the days when the bow and arrow were the chief weapons of warfare, it was customary

for the sheriffs of the counties where geese were reared to gather sufficient quantities of feathers

of the old ballads contain references to winging the arrow with goose feathers. instance is the following:

> Bend all your bows,' said Robin Hood: 'And with the gray goose wing, Such sport now show as you would do In the presence of the king.'

To check the exportation of feathers, a heavy

export duty was put upon them.

The goose frequently figures in English tenures. In a poem by Gascoigne, published in 1575, there is an allusion to rent-day gifts, which appear to have been general in the olden time:

And when the tenants come to pay their quarter's

They bring some fowle at Midsummer, a dish of fish in Lent. At Christmasse a capon, and at Michaelmasse a goose,

A strange manorial custom was kept up at Hilton in the days of Charles II. An image of brass, known as Jack of Hilton, was kept there. 'In the mouth,' we are told, 'was a little hole just large enough to admit the head of a pin; water was poured in by a hole in the back, which was afterwards stopped up.' The figure was then set on the fire; and during the time it was blowing off steam, the lord of the manor

of Essington was obliged to bring a goose to Hilton and drive it three times round the hallfire. He next delivered the goose to the cook; and when dressed, he carried it to the table and received in return a dish of meat for his own

mess.

In bygone times, Lincolnshire was a great place for breeding geese; and its extensive bogs, marshes, and swamps were well adapted for the purpose. The drainage and cultivation of the land have done away with the haunts suitable for the goose; but in a great measure Lincolnshire has lost its reputation for its geese. Frequently in the time when geese were largely bred, one farmer would have a thousand breedinggeese, and they would multiply some sevenfold every year, so that he would have under his care annually some eight thousand geese. He had to be careful that they did not wander from the particular district where he had a right to allow them to feed, for they were regarded as trespassers, and the owner could not get stray geese back unless he paid a fine of twopence for each offender.

Within the last fifty years it was a common occurrence to see on sale in the market-place at Nottingham at the Goose Fair from fifteen to twenty thousand geese, which had been brought from the fens of Lincolnshire. A street on the Lincolnshire side of the town is called Goose-

The origin of the custom of eating a goose at Michaelmas is lost in the shadows of the dim historic past. According to one legend, Saint Martin was tormented with a goose, which he killed and ate. He died after eating it; and ever since, Christians have, as a matter of duty, on the saint's day sacrificed the goose. We have seen from the preceding quotation from Gascoigne that the goose formed a popular Michaelmas dish from an early period.

It is a common saying, 'The older the goose the to wing the arrows of the English army. Some harder to pluck,' when old men are unwilling to part with their money. The barbarous practice of plucking live geese for the sake of their quills gave rise to the saying. It was usual to pluck live geese about five times a year. Quills for pens were much in request before the introduction of steel pens. One London house, it is stated, sold annually six million quill pens. A professional pen-cutter could turn out about twelve hundred daily.

Considerable economy was exercised in the use of quill pens. Leo Allaticus, after writing forty years with one pen, lost it, and it is said he mourned for it as for a friend. William Hutton wrote the History of his family with one pen, which he wore down to the stump. He put it aside, accompanied by the following lines:

THIS PEN.

As a choice relic I'll keep thee, Who saved my ancestors and me. For seven long weeks you daily wrought Till into light our lives you brought, And every falsehood you avoided While by the hand of Hutton guided.

June 3, 1779.

In conclusion, it may be stated that Philemon Holland, the celebrated translator, wrote one of his books with a single pen, and recorded in rhyme the feat as follows:

> With one sole pen I wrote this book, Made of a gray goose quill; A pen it was when I it took, A pen I leave it still.

SHEEP-SHEARING BY MACHINERY.

The ever-increasing substitution of machinery in place of hand-labour in all branches of industry is too often witnessed to need either comment or enforcement. Our readers, indeed-so accustomed are the public to novel adaptations of mechanical power-may hardly evince surprise in learning that the labours of the inventor have been successfully applied to furnishing means for shearing sheep by machinery, and that possibly ere long the well-known hand-shears used for this purpose will have given place to a patent shears actuated by steam-power, which will perform its work in a cheaper, speedier, and more effectual manner.

The sheep-shearing machine recently placed before the public is due to Mr Frederick York Wolseley, of Euroca Station, New South Wales a brother of the distinguished soldier of that name —who has devoted many years of patient ingenuity to perfecting his invention. The machine itself may be briefly described as follows: A toothcomb upon which works a three-bladed knife, in the same manner as a patent horseclipper, is pushed by the operator into the fleece of the animal to be sheared, the cutter being actuated by a cord of round gut, working inside a flexible tube six feet six inches in length. The flexible tube leaves the operator free to work the comb and cutters backwards and forwards.

Shafting of ordinary description is erected in the shearing-house, carrying wheels two feet in diameter and five feet apart, the motion being communicated from the main shafting to a series of leather bevel-wheels situated below, each of noster Row, London, and 339 High Street, Edinburgh.

which in its turn imparts a rotary movement to the gut core inside the flexible tube, and so to the small rods working the crank inside the casing of the machine. The pressure of the cutter on the comb is regulated by a tension-screw on the back of the shears. All the working parts are covered, with the exception of the comb and cutter.

Hand-labour, horse-power, water-power, or a steam-engine (portable, if desired) with a boiler to burn either wood or coal, can be employed to furnish motive-power to the main shafting, as the facilities of each locality or the number of

sheep to be dealt with may demand.

One man, it may be added, can furnish power sufficient for three machines; a horse can drive from ten to twenty of them; whilst an eight horse-power steam-engine will actuate one hun-dred shears. The time occupied in shearing one sheep with the new patent is from three and a

half to five minutes.

Many advantages are claimed for the novelty now under consideration. The work is per-formed more thoroughly than by hand, it being calculated that on an average some ten additional ounces of wool per merino sheep are obtained by its employment. The operation, moreover, is carried out more humanely, the cuts and stabs often inflicted in hand-shearing, more especially when executed as 'piece-work,' being entirely avoided, together with the consequent damage and deterioration to the pelts. It has been estimated that no less than one per cent. of the animals perish from injuries due principally to hand-shearing. The labour entailed on the operator is also considerably reduced; and aching hands, swollen wrists, and cuts or stabs to the worker himself, should be things of the past.

A series of exhaustive trials in Australia abundantly testify to the high esteem in which the new machine, the cost of which is very moderate, is held. When it is added in conclusion that Australia alone is computed to hold upwards of one hundred millions of sheep, it is evident how wide a field, if only in that one quarter of the globe, exists for the new sheep-shearing

machine.

LIFE IN DEATH.

ALL life must fade. The scented damask rose; The hawthorn buds that burgeon on the spray; The dews that dry before the sun away-All these, to man, a tale of Death disclose. Yet Life stands smiling o'er these transient woes: 'Tis true, he says, the crimson rose must fade; Sweet hawthorn buds lie scattered on the plain; The dews no longer pearl the grassy lawn; Yet flowers of May spring forth to deck the shade, Dewdrops dissolving fall in summer rain, Roses in odorous sweetness live again. And silver starlight melts in golden dawn. Then shrink not, man, nor faint and fear to die; Life crowns thy death with Immortality.

M. C. R.

Printed and Published by W. & R. CHAMBERS, 47 Pater-

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